

18 JUN 2005
17

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN 03/01054

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷ C07K 5/10, C12N 15/63, C12N 15/31 A61K 38/07 A61P 37/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷ C07K, C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

The published documents of Chinese patent applications and non-patent literatures

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI EPODOC PAJ NCBI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| P, X | WO03006492 (PEPHARM R&D LIMITED) 23, JAN 2003(23.01.03), claims 1-11; | parts of 1-18 |
| A | US3992364 16. NOV 1976 (16.11.76), whole document | parts of 1-18 |

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
23.FEB.2004 (23.02.04)

Date of mailing of the international search report

13 · MAY 2004 (13 · 05 · 2004)

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

This application does not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: claim 1 claims a substantially pure peptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 1-30, said peptide being operably linked to a molecule which enhances its therapeutic effectiveness. Wherein the peptides selected from the group consisting of SEQ ID NO: 1-30 are different at the length and their amino acid sequence are different too, they are different matters and lack the corresponding special technical feature. There is another feather of "operably linked to a molecular" which seems to be the corresponding special technical feature, but many potential conjugating molecules are already known in the art, on the other hand, this application does not open any novel conjugating molecule. So this feather can not be the corresponding special technical feature.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
The application relates to 30 invention and the search is restricted to the invention of peptide comprising an amino acid sequence of SEQ ID NO: 1 and its corresponding technical solution.

Remark on protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN03/01054

| ---FAMI of wo03006492 Document--- | | | | ***** | |
|-----------------------------------|----|--------------|--------|--|--------------------------------------|
| PUBLICATION | CT | PUB-DATE | NPR DT | CLASSES | |
| ---WO03006492--A | N | 2003-01-23 | 1 * | EC: C07K5/08A1A C07K5/10A2 C07K7/06A ICO: K61K38/00 | C07K5/08A2 C07K5/10H C07K7/08A |
| ---CN1398893--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |
| ---CN1398892--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |
| ---CN1398891--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |
| ---CN1398890--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |
| ---CN1398879--- | A | N 2003-02-26 | 1 I | IC: C07K5/08 C12N15/31 A61P37/02 | C12N15/63 A61K38/06 |
| ---CN1398878--- | A | N 2003-02-26 | 1 I | IC: C07K5/08 C12N15/31 A61P37/02 | C12N15/63 A61K38/06 |
| ---CN1398889--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/07 |
| ---CN1398888--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |
| ---CN1398887--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/28 |
| ---CN1398877--- | A | N 2003-02-26 | 1 I | IC: C07K5/08 C12N15/31 A61P37/02 | C12N15/63 A61K38/06 |
| ---CN1398886--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |
| ---CN1398883--- | A | N 2003-02-26 | 1 I | IC: C07K5/10 C12N15/31 A61P37/02 | C12N15/63 A61K38/07 |
| ---CN1398885--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |
| ---CN1398884--- | A | N 2003-02-26 | 1 I | IC: C07K7/06 C12N15/31 A61P37/02 | C12N15/63 A61K38/08 |

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN03/01054

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| ---CN1398882--- | A | N 2003-02-26 | 1 | I | IC : C07K5/10 C12N15/31 | C12N15/63 A61K38/07 |
| | | | | | A61P37/02 | |
| ---CN1398881--- | A | N 2003-02-26 | 1 | I | IC : C07K5/10 C12N15/31 | C12N15/63 A61K38/07 |
| | | | | | A61P37/02 | |
| ---CN1398880--- | A | N 2003-02-26 | 1 | I | IC : C07K5/10 C12N15/31 | C12N15/63 A61K38/07 |
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| ---CN1398894--- | A | N 2003-02-26 | 1 | I | IC : C07K7/06 C12N15/31 | C12N15/63 A61K38/08 |
| | | | | | A61P37/02 | |
| ---CN1400217--- | A | N 2003-03-05 | 2 | I | IC : C07K5/10 C12N15/31 | C12N15/63 A61K38/07 |
| | | | | | A61P37/02 | |
| ---CN1400218--- | A | N 2003-03-05 | 1 | I | IC : C07K7/06 C12N15/31 | C12N15/63 A61K38/08 |
| | | | | | A61P37/02 | |
| ---CN1410447--- | A | N 2003-04-16 | 2 | I | IC : C07K7/08 C12N15/31 | C12N15/63 A61K38/10 |
| | | | | | A61P37/02 | |
| ---CN1410441--- | A | N 2003-04-16 | 2 | I | IC : C07K7/06 C12N15/31 | C12N15/63 A61K38/08 |
| | | | | | A61P37/02 | |
| ---CN1410446--- | A | N 2003-04-16 | 2 | I | IC : C07K7/08 C12N15/31 | C12N15/63 A61K38/10 |
| | | | | | A61P37/02 | |
| ---CN1410445--- | A | N 2003-04-16 | 2 | I | IC : C07K7/08 C12N15/31 | C12N15/63 A61K38/10 |
| | | | | | A61P37/02 | |
| ---CN1410440--- | A | N 2003-04-16 | 2 | I | IC : C07K7/06 C12N15/31 | C12N15/63 A61K38/08 |
| | | | | | A61P37/02 | |
| ---CN1410439--- | A | N 2003-04-16 | 2 | I | IC : C07K7/06 C12N15/31 | C12N15/63 A61K38/08 |
| | | | | | A61P37/02 | |
| ---CN1410438--- | A | N 2003-04-16 | 2 | I | IC : C07K5/10 C12N15/31 | C12N15/63 A61K38/07 |
| | | | | | A61P37/02 | |
| ---CN1410444--- | A | N 2003-04-16 | 2 | I | IC : C07K7/08 C12N15/31 | C12N15/63 A61K38/10 |
| | | | | | A61P37/02 | |
| ---CN1410443--- | A | N 2003-04-16 | 2 | I | IC : C07K7/08 C12N15/31 | C12N15/63 A61K38/10 |
| | | | | | A61P37/02 | |
| ---CN1410442--- | A | N 2003-04-16 | 2 | I | IC : C07K7/06 C12N15/31 | C12N15/63 A61K38/08 |
| | | | | | A61P37/02 | |